

Notice of Allowability

Application No.

09/774,266

Examiner

William K Cheung

Applicant(s)

HEDHLI ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE.
2. ☒ The allowed claim(s) is/are 1-11, 15, 33.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

Request for Continued Examination

1. The request filed on March 12, 2004 for a Request for Continued Examination (RCE) under 37 CFR 1.53(d) based on parent Application No. 09774266 is acceptable and a RCE has been established. An action on the RCE follows.
2. In view of Amendment after Final filed January 14, 2004 and its duplicate filed March 12, 2004, claims 12-14 have been cancelled. Claims 1-11, 15-34 are pending. Claims 16-32 and 34 are drawn to non-elected subject matter.
3. In view of Amendment after Final filed January 14, 2004, the rejection of claims 1, 7, 15, 33 under 35 U.S.C. 102(b) as being anticipated by Lunkwitz et al. (US 5,540,837) is withdrawn.
4. In view of Amendment after Final filed January 14, 2004, the rejection of claims 1-3, 6, 8, 9, 15, 33 under 35 U.S.C. 102(b) as being anticipated by Prakash et al. (WO 98/22989) is withdrawn.

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5. In view of Amendment after Final filed January 14, 2004, the rejection of claims 1-3, 7, 8, 11 under 35 U.S.C. 102(b) as being anticipated by Röber et al. (US 5,554,426) is withdrawn.

EXAMINER'S AMENDMENT

6. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney Luke A. Kilyk (Registration No. 33,251) on March 24, 2004.

7. Cancel claims 16-32 and 34.

Allowances

8. Claims 1-11, 15, 33 are allowed.

9. The following is an examiner's statement of reasons for allowance:

As of the date of this office action, the examiner has not located or identified any reference that can be used singularly or in combination with another reference including the closest prior art of Lunkwitz et al. (US 5,540,837), Prakash et al. (WO 98/22989), and Röber et al. (US 5,554,426) to render the present invention anticipated or obvious to one of ordinary skill in the art.

*The invention of claims 1-11, 15, 33 relates to a **polymer blend** comprising:*

- a) at least one **acrylic resin** or at least one **acrylic resin and at least one vinyl resin**, wherein said at least one **acrylic resin or vinyl resin** has **at least one ionic or ionizable group** wherein said **ionic or ionizable group** is a **sulfonated group or phosphonated group** or both; and*
- b) at least one **thermoplastic fluoropolymer**, wherein a) and b) are different.*

The closest prior art Lunkwitz et al. (col. 9, line 55-67) discloses a membrane which comprises a PTFE/polyacrylic acid blend prepared by treating PTFE membrane with polyacrylic acid. However, Lunkwitz et al. are silent on a polymer blend comprising

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an acrylic resin and a vinyl resin which comprises a sulfonated or phosphonated group.

Therefore, it would not be apparent to one of ordinary skill in art to use the polymer blend teachings in Lunkwitz et al. to obtain the invention of claims 1-11, 15, 33.

Prakash et al. (page 7, line 6-17) disclose a membrane composed of a polyblend of sulfonated polystyrene and poly(vinylidene fluoride). However, Prakash et al. are silent on a polyblend comprising a sulfonated group or phosphonated group. Therefore, it would not be apparent to one of ordinary skill in art to use the polyblend teachings of Prakash et al. to obtain the invention of claims 1-11, 15, 33.

Röber et al. (abstract) disclose a multiplayer plastic pipe which contains a layer comprising a mixture (or a blend) of PVDF and an acrylate copolymer. Further, Röber et al. (col. 3, line 50-55) disclose that the acrylate copolymer contains 0-15 weight % of carboxylic acid ionic or ionizable group. However, Röber et al. are silent on a membrane comprising a sulfonated group or phosphonated group. Therefore, it would not be apparent to one of ordinary skill in art to use the teachings in Röber et al. to obtain the invention of claims 1-11, 15, 33.

Further, there is no motivation to combine the teachings in Lunkwitz et al. (US 5,540,837), Prakash et al. (WO 98/22989), and Röber et al. (US 5,554,426) to obtain the invention of claims 1-11, 15-34. Therefore, it would not be apparent to one of ordinary skill in art to use the teachings in Lunkwitz et al. (US 5,540,837), Prakash et al.

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(WO 98/22989), and Röber et al. (US 5,554,426), individually or in combination to obtain the invention of claims 1-11, 15, 33. The invention of claims 1-11, 15, 33 is allowed.

In light of the above discussion, it is evident as to why the present claims are patentable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, and to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K Cheung whose telephone number (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1300.

A handwritten signature in black ink, appearing to read 'William K. Cheung', with a stylized, flowing script.

William K. Cheung

Patent Examiner

March 25, 2004